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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,482	08/01/2001	Henry Houh	EMPIR-018DUS	5573

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EXAMINER	
MURPHY, RHONDA L	

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/920,482	HOUH, HENRY	
	Examiner	Art Unit	
	Rhonda Murphy	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *23 May 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on May 23, 2005. Accordingly, claim 22 has been added and claims 1-22 are currently pending in this application.

Claim Objections

1. Claims 5 and 15 are objected to because of the following typographical errors:

In claim 5, line 1, the number "4" should have a strikethrough.

In claim 15, line 3, "part" shall be replaced with "port".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Regarding claim 22, line 13, the term "max/average" renders the claims vague and indefinite because it is unclear whether the terms mean both or either/or.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 9-11, 13 –15 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Pruthi et al. (US 2002/0105911).

Regarding claim 1, Pruthi teaches a network processor (Fig. 3, 302) capable of performing switching and routing functions (page 3, paragraph 39 and 40; packets are filtered to pass only the IP packets), said network processor having a plurality of processors wherein selected ones of said processors are programmed to provide test system functionality (plurality of processors include processor query engine 316, memories 320 and 322; page 3, paragraph 36, 37 and 39, programming to generate statistics, analyzing traffic, and filtering functions); storage associated with the network processor (318); an interface coupling the network processor to a communications network (interface 304, 306); instructions and data within said storage (it is known in the art that a storage medium contains instructions and data), the instructions and data directing the network processor to function as a packet capture and analysis tool used to analyze packets on the communications network (page 3, paragraph 36; processor converts the packets into records and stores the records in memory; processor includes suitable programming to generate statistics corresponding to the packets; page 2, paragraph 31; the network monitor receives (monitors) data communications (traffic) on communication line 104 and provides real-time metrics or statistics of the data traffic on the communication line).

Regarding claim 9, Pruthi teaches analyzing packets as groups of streams to provide group statistics (page 4, paragraph 49; packets are segregated into groups corresponding to packets received by the network monitor during successive time periods), said group statistics selected from the group consisting of length of time (page 4, paragraph 49; statistic generator then generates statistics for each of the successive time periods).

Regarding claim 10, Pruthi teaches analyzing packets to provide interface characteristics selected from the group consisting of percent usage of interface bandwidth (page 11, paragraph 136; UDP bandwidth usage .32%).

Regarding claim 11, Pruthi teaches the same limitations as described above in the rejection of claim 1. Additionally, Pruthi teaches the instructions and data directing the network processor to function as a packet capture and analysis tool used to provide profiles of network parameters (page 11, paragraph 140; subroutines in the network monitor analyze traffic - parameters of quality of service such as packet loss rates, network delays, frame rates, etc.)

Regarding claim 13, Pruthi teaches the same limitations as described above in the rejection of claim 1. Additionally, Pruthi teaches the instructions and data directing the network processor to function as a packet capture and analysis tool used to capture packets on the communications network (As described in the specification, the capture functionality is concerned with only capturing the packets of interest. Pruthi states: If a user only wishes to analyze traffic of IP packets, the packets are filtered to pass only the IP packets; page 3, paragraphs 39 and 40).

Regarding claim 14, Pruthi teaches filtering packets such that only packets meeting criteria are captured. As described above in the rejection of claim 12, the criterion is that of filtering only IP packets, as desired by the user.

Regarding claim 15, Pruthi teaches criteria selected from the group consisting of a source IP address and destination IP address (page 4, paragraph 48).

Regarding claim 22, Pruthi teaches the same limitations as described above in the rejection of claim 1. Furthermore, Pruthi teaches analyzing packets as groups of streams to provide group statistics (page 4, paragraph 49; packets are segregated into groups corresponding to packets received by the network monitor during successive time periods), said group statistics selected from the group consisting of length of time (page 4, paragraph 49; statistic generator then generates statistics for each of the successive time periods).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pruthi et al. (US 2002/0105911) in view of Sicher et al. (US 6,385,195).

Regarding claim 2, Pruthi teaches the data and instructions directing the network processor to analyze packet streams at any protocol layer in the communications

network and services that include real-time multimedia and voice over IP (page 5, paragraph 54). Pruthi does not explicitly disclose Real Time Transport Protocol (RTP) as one of the protocol layers.

However, Sicher teaches an RTP protocol. In view of this, it would have been obvious to one having ordinary skill in the art to include an RTP protocol for the purpose of supporting the transport of real-time data over IP, by providing payload identification, sequence numbering, and time stamping.

7. Claim 3 – 6, 12 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pruthi et al. (US 2002/0105911).

Regarding claim 3, Pruthi teaches data and instructions directing the network processor to analyze packet streams at any protocol layer (page 5, paragraph 54). In addition, Pruthi specifies protocols including TCP, UDP and TCP/IP (page 2, paragraph 32). SCTP, MGCP, H.323 and H.248 are all protocols that can be utilized within an IP network. Given this, and Pruthi's teaching of analyzing packet streams at any protocol layer, it would have been obvious to one having ordinary skill in the art to include SCTP, MGCP, H.323 and H.248 protocols in order to allow a variety of protocols to analyze the packet streams.

Regarding claim 4, Pruthi teaches the data and instructions directing the network processor to analyze packet streams at any protocol layer on the communications network. It is known in the art that signaling protocols provide messages to endpoints within an IP network. Such protocol would be H.323, which defines a set of call control

and channel setup specifications. Given this, and Pruthi's capability to analyze packets streams at any protocol layer, it would have been obvious to have a signaling protocol packet stream analyzed by the processor in order to initiate call setup and call tear down functions.

Regarding claim 5, Pruthi teaches packets analyzed for characteristics selected from the group consisting of total packets (page 2, paragraph 33; exemplary statistics include byte counts).

Regarding claim 6, Pruthi teaches the analysis of packets to provide performance statistics of streams of packets on said communications network (statistics corresponding to network performance; page 5, paragraph 53).

Regarding claim 12, Pruthi teaches profiles of network parameters consisting of loss and delay (page 11, paragraph 140; parameters of quality of service such as packet loss rates and network delays). It is known in the art that jitter, packet reordering and packet duplication are other network parameters observed in determining the quality of service of a network. Therefore, it would have been obvious to one having ordinary skill in the art to include jitter, packet reordering and packet duplication as parameters in order to observe latency, sequencing and replication factors.

Regarding claim 16, Pruthi teaches a packet capture and analysis tool used to capture packets as described in the rejection of claim 13. IP packets are a type of packet captured by the user. In order to capture packets, there must be a trigger to indicate the beginning and end of the packet capture. Therefore, it would have been obvious to one having ordinary skill in the art to have a trigger used to start and/or stop the packet

capture in order to indicate the start and end of the capture.

Regarding claim 17, Pruthi teaches a packet capture and analysis tool used to capture packets. As described in claim 15 above, a trigger is used to start and/or stop a packet capture. It is known in the art that the start of a packet stream is an event that triggers the start of a packet capture. Therefore, it would have been obvious to one skilled in the art to use the start of a packet stream to start the packet capture, in order to capture packets from the beginning of the stream.

Regarding claim 18, Pruthi teaches a packet capture and analysis tool used to capture packets as described in the rejection of claim 13. Pruthi further teaches using data stripping to remove unwanted data from a captured packet (page 3, paragraph 40; In addition to the filtering step only passing IP packets, the filter may also be used to pass only a portion of the packets, such as only the IP portion, by truncating the Ethernet overhead portion).

Regarding claim 19, Pruthi teaches a packet capture and analysis tool used to capture packets as described in the rejection of claim 18. Pruthi further teaches using data stripping that excludes data selected from the group consisting of packet header, packet payload and partial payload (page 3, paragraph 40; truncating the Ethernet overhead portion; filtering may be performed based on any one or more of the plurality of fields corresponding to a portion of the IP packet).

Regarding claim 20, Pruthi further teaches captured packets that are post process analyzed (page 3, paragraph 41; further statistic is generated using both the stored records and the stored statistics).

Regarding claim 21, Pruthi teaches post process analyzing as described in the rejection of claim 13, wherein packet viewing is a form of packet filtering.

8. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pruthi et al. in view of AudioPro VOIP Network Monitoring & Analysis.

Regarding claim 7, Pruthi teaches the analysis of packets to provide performance statistics, but fails to teach call release time.

However, AudioPro VOIP Network Monitoring & Analysis teaches performance and connection information such as call release time. In view of this, it would have been obvious to one having ordinary skill in the art to include call release time as a statistic for the purpose of analyzing the time in which a call was released.

Regarding claim 8, Pruthi teaches a packet capture and analysis tool used to analyze packets. Pruthi fails to explicitly disclose the analysis of audio statistics for packet jitter and loss.

However, AudioPro VOIP Network Monitoring & Analysis teaches the analysis of audio streams for jitter and loss (page 3, column 2). In view of this, it would have been obvious to one skilled in the art to incorporate the analysis of packet jitter and loss for audio streams, in order to observe the quality of audio streams, by considering the amount of packet loss and jitter.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy
Examiner
Art Unit 2667

rlm

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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 8/5/05